

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A mounting process simulation program recorded on a computer-readable medium of causing a computer to execute a simulation of a mounting process composed of a plurality of steps, the program causing the computer to execute:

a first simulation executing step of executing a simulation based on a first condition selected for a first step;

a simulation condition deciding step of ~~deciding~~ selecting a simulated result simulated-in-from the first simulation executing step as a simulation condition for a second step positioned subsequent to the first step; and

a second simulation executing step of executing a simulation of the second step based on a second condition containing at least the simulation condition.

Claim 2 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, wherein analysis result data ~~simulated previously~~ are generated at every step based on a plurality of

conditions ~~are generated every step~~ which were previously simulated, and

the second simulation executing step executes the simulation of the second step by sampling the analysis result data simulated based on the second condition.

Claim 3 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, wherein analysis result data ~~simulated previously~~ are generated at every step based on a plurality of conditions ~~are generated every step~~ which were previously simulated, and

the second simulation executing step executes the simulation of the second step by executing an interpolation calculation using the analysis result data simulated based on a preceding or succeeding condition of the second condition.

Claim 4 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 2 or 3, wherein the analysis result data ~~simulated previously~~ are generated at every step based on a plurality of conditions ~~are generated every step~~ which were previously simulated, and

the second simulation executing step executes the simulation of the second step by converting the analysis

result data generated by other device into a predetermined data format.

Claim 5 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 4, wherein at least one of the following types of data are generated by an external system and is selected as the analysis result data: data simulated previously at every step by using via a CAE tool, mounting resultant data ~~of~~ from a mounting equipment provided to a mounting site at every step, the mounting resultant data comprising fraction defective data and production results; and experimental data derived by an experiment in which an operation in each step is supposed ~~is selected as the analysis result data;~~

wherein the type of data selected as the analysis result data is converted to a common format.

Claim 6 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, further causing the computer to execute an animation displaying step of displaying three-dimensionally an animation to indicate a result simulated in the second simulation executing step on a display device, by reading

previously-stored animation elements based on a definition file in which an operation sequence is defined every step.

Claim 7 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, wherein the second simulation executing step includes a condition acquiring step of reading a condition selected in response to an input from a condition database in which a plurality of conditions are stored previously in combination, and adding the condition to the second condition.

Claim 8 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 7, wherein the condition acquiring step further reads data from a CAD system in response to the input and adds the data to the second condition.

Claim 9 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, wherein the first simulation executing step executes the simulation to contain production variation in the first step,

the simulation condition deciding step decides the result simulated in the first simulation executing step to contain the production variation as the simulation condition, and the second simulation executing step executes the simulation of the second step based on the second condition ~~to contain~~ which contains the production variation.

Claim 10 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, wherein the first simulation executing step executes the simulation based on a change of a control item set in the first step as the first condition, the simulation condition deciding step decides the result simulated based on the change of the control item in the first simulation executing step as the simulation control, and the second simulation executing step executes the simulation of the second step based on the second condition ~~to contain~~ which contains the result simulated based on at least the change of the control item.

Claim 11 (currently amended): A mounting process simulation program recorded on a computer-readable medium according to claim 1, further causing the computer to execute a reliability evaluating step of executing a reliability evaluation of a product manufactured in the mounting process

by using the result simulated in the second simulation
executing step.

Claim 12 (currently amended): A mounting process
simulation program recorded on a computer-readable medium
according to claim 1, further causing the computer to execute
a fraction defective calculating step of calculating a
fraction defective of a product manufactured in the first step
and the second step, by using results simulated in the first
simulation executing step and the second simulation executing
step.

Claim 13 (currently amended): A mounting process
simulation system provided to steps of a mounting process
composed of a plurality of steps to execute a simulation of
the mounting process, comprising:

an inputting portion for inputting a condition to execute
the simulation;

an executing portion for executing the simulation based
on the condition input from the inputting portion; and

an outputting portion for outputting a result of the
simulation executed by the executing portion;

wherein the executing portion includes:

a condition table forming portion ~~forming~~ that forms
a condition table that lists a simulation condition of a

second step positioned subsequently to a first step, which
whereby the condition table is formed by using a simulation
result simulated based on a first condition selected for at
least a first step, ~~of a second step positioned subsequently~~
~~to a first step, and~~

a simulation result outputting portion executes the
simulation of the second step based on the condition table and
a condition input from the inputting portion and outputs a
result to the outputting portion.

Claim 14 (currently amended): A mounting process
simulation method of executing a simulation of a mounting
process composed of a plurality of steps comprising:

a first simulation executing step of executing a
simulation based on a first condition selected for a first
step;

a simulation condition deciding step of ~~deciding~~
selecting a simulated result simulated-in-from the first
simulation executing step as a simulation condition for a
second step positioned subsequent to the first step; and

a second simulation executing step of executing a
simulation of the second step based on a second condition
containing at least the simulation condition.